

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/028400 A3

- (51) International Patent Classification⁷: **A61M 31/00**, 35/00, A61L 15/16
- (21) International Application Number: PCT/US2003/025897
- (22) International Filing Date: 20 August 2003 (20.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/404,404 20 August 2002 (20.08.2002) US
60/451,682 5 March 2003 (05.03.2003) US
- (71) Applicant (for all designated States except US): **GENERAL WOUND KARE, INC. (A CORPORATION OF DELEWARE)** [US/US]; 275 Central Park West, Apt. #10F, New York, NY 10024-3049 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SIMONSON, Richard, M.** [US/US]; 275 Central Park West, Apt. #10F, New York, NY 10024-3049 (US). **MCALLISTER, Theodore** [US/US]; 2530 Harry Wurzbach Highway, San Antonio, TX 78209 (US). **SUCHANEC, Richard, R.** [US/US]; 107 Meadowwood Drive, Newark, DE 19711 (US). **WHITE, Daniel, A.** [US/US]; 401 East Guadalupe Street, La Grange, TX 78945 (US).
- (74) Agent: **HOLT, William, H.**; Law Offices of William H. Holt, Unit 2 - - First Floor, 1423 Powhatan Street, Alexandria, VA 22314 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 1 July 2004
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: MEDICAL PAD, AND METHOD FOR MAKING AND USING

(57) Abstract: A germicidal absorptive material for use in surgical packings, wound bandages, sanitary tampons and bed sore prevention and/or treatment uses is provided by a foam-like matrix of hydrophilic polyurethane polymer to which application-specific loads of a germicidal disinfectant dye have been made. Polyurethane polymer of various densities and thicknesses exhibits an exceptional ability to absorb different levels of a number of disinfectant dyes, both basic and acidic, such as gentian violet and methylene blue, respectively. The relationship between dye-load and application-specific uses permits a totally-bound gentian violet pad to be used as a conventional bandage or pad on a surface wound with the capability of preventing the incursion of external pathogens from entering the wound through the pad, where the pathogens are killed by the bound-dye. The wound exudate is absorbed safely by the pad, where wound-originating pathogens are also killed. When the loaded dye's concentration is saturated by exceeding the bound-dye limit, the limited free-dye is available to be delivered to the wound, particularly deep wounds, to rapidly kill pathogens in the wound. The free dye delivery pad can then be replaced by the bound-dye pad to absorb the wound exudate.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/25897

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 31/00, 35/00; A61L 15/16

US CL : 604/286, 304

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 604/286, 304

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3,635,652 A (STRECK) 18 January 1972 (18.01.1972), see entire document.	1-10
Y	US 3,961,629 A (RICHTER et al.) 08 June 1976, (08.05.1976), see entire document.	1-10
Y	US 5,811,471 A (SHANBROM) 22 September 1998 (22.09.1998), see entire document, especially abstract, column 2, line 40 to column 3, line 2.	1-10
Y,P	US 2003/0149106 A1 (MOSBEY et al.) 07 August 2003 (07.08.2003), see entire document, especially page 1, paragraph 1, page 7, paragraphs 70-75, page 8, paragraph 77 to page 9, paragraph 83.	1-10

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

07 April 2004 (07.04.2004)

Date of mailing of the international search report

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Donna Jago

Telephone No. (571) 272-0600

INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

WEST 2.2 Search terms, gentian violet, glycerin, pad or bandage or gauze or sponge or surgical, polyurethane, antibacterial or antimicrobial or antibiotic, brilliant green malachite green, methyl blue, methylene blue, acridine orange, acridine yellow, quinacrine, trypan blue, trypan red.